

REMARKS

Claims 68, 34-36, 50-56, 58, 60-75, and 76-82 have been rejected under 35 USC § 103(a) as being patentable over UK Patent Application GB 2,072,516 to Simpson, in view of European Patent Application 0252890 to Söderberg, and U.S. Patent 1,701,277 to Shindel. Applicants respectfully submit that this rejection cannot be sustained.

None of the references relied on to reject the presently-claimed subject matter teach or suggest holding the flexible flap against the flap-retaining surface in a location and position relative to the seal surface such that the flap is pressed towards the seal surface in a substantial abutting relationship therewith. In applicants' invention, a valve cover is disposed over the valve seat and it comprises a surface that mechanically holds the flexible flap against the flap-retaining surface. The flexible flap is held against the flap-retaining surface in a location and position relative to the seal surface such that the flap is pressed towards the seal surface in a substantial abutting relationship therewith under any orientation of the valve when a fluid is not passing through the orifice. In both Simpson and Shindel, the flap-retaining surface is in direct alignment with the seal surface:

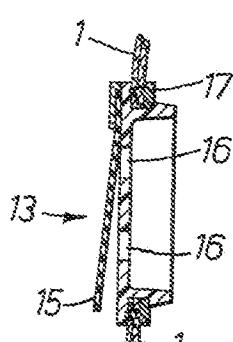
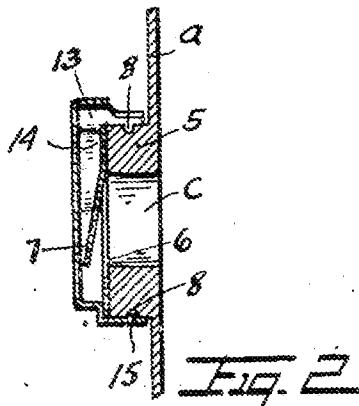


Fig. 2.

Simpson



Shindel

As such, the flexible flap cannot be held in a location and position such that the flap is pressed towards the seal surface. Therefore, the use of Shindel's valve cover in Simpson is of no real significance. Although Söderberg teaches having a flexible flap pressed against the seal surface,

Söderberg does not do this by use of a valve cover or by the use of a flap-retaining surface that is located and positioned relative to the seal surface such that the flap is pressed towards the seal surface in an abutting relationship with it. In Söderberg, "the rubber material [of the flexible flap] is resilient and if the membrane is given a beveled edge, it will then seal against the border of the valve seat in a closed position...." Thus, Söderberg's valve remains closed as a result of the valve membrane material and its shape and not as the result of any valve cover or the positioning of the flap-retaining surface relative to the seal surface.

Because the three references relied on to reject this application fail to teach or suggest a basic feature of applicants' claimed invention, the rejection under 35 USC § 103 cannot be properly sustained.

Please reconsider the outstanding rejection in light of the comments provided above.

Respectfully submitted,

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